IN THE CLAIMS:

Please amend the claims as follows:

1. (Amended) A semiconductor device structure having a [homogenous] void-free, homogeneous aluminum alloy material within contact holes in an insulating layer overlying a substrate, the semiconductor device structure formed by the method comprising:

depositing an aluminum material on an exposed surface of the insulating layer and over the contact holes;

heating the aluminum material to reflow the aluminum material into the contact holes so as to at least partially fill the contact holes;

applying pressure to the aluminum material to completely fill the contact holes;

depositing a different metal material on the aluminum material over the contact holes; and

diffusing the different metal material into the aluminum material to form a homogeneous aluminum alloy fill material in the contact holes.

23. (Amended) A semiconductor assembly formed by the method comprising:

providing a semiconductor substrate having an insulating layer overlying the semiconductor substrate, the insulating layer having contact holes formed therein;

simultaneously depositing and heating an aluminum material an on outer surface of the insulating layer and over the contact holes;

applying pressure to the aluminum material to completely fill the contact holes;

depositing a different metal material on the aluminum material; and

diffusing the different metal material into the aluminum material to form a substantially homogeneous void-free, aluminum alloy fill material in the contact holes.